PAIN SYNDROMES: Treatment by Paravertebral Nerve Block. By Bernard Judovich, B.S., M.D., Instructor in Neurology, Graduate School of Medicine, University of Pennsylvania, and William Bates, B.S., M.D., Professor of Surgery, Graduate School of Medicine, University of Pennsylvania. Third Edition. 181 Illustrations. F. A. Davis Company, Philadelphia, Pa., 1949. $6.00.

This book is an unusual monograph on the interpretation of pain. The authors believe that the presence of tenderness, and its distribution, whether local or segmental, is of great aid in diagnosis and therapy. Their premises are that the combination of segmental pain and tenderness are usually due to factors which irritate roots, ganglia or trunks of the spinal sensory nerves, rather than to painful impulses originating in diseased viscera. In other words, pain and segmental tenderness of skin in most instances appears to them to be of somatic rather than of visceral origin.

As in many theses, sometimes the implications go beyond the demonstration of the proof. However, the book has much to offer. In Chapter II, for example, the desirability of improvement of posture is emphasized and the way to accomplish it is pointed out. In Chapter IX it is brought out that pronounced pain and tenderness of the abdomen, as a cardinal symptom, is not caused by adhesions unless other symptoms are also present. In chapters III and VIII the authors return again and again to their main thesis, that persistent segmental pain is the result of lesions in or affecting the spinal nerves. In Chapter VIII, too, are developed arguments against the Head-McKenzie theory of visceral sensory reflex pain and the reliability of Murphy's sign.

The last portion of the book is given to the technique of injection for neuralgia. The photographs and diagrams are numerous, clear and helpful.

The book is essentially a clinical exposition. It is worthwhile and useful for the internist, the surgeon, the orthopedist, the gynecologist and especially the general practitioner. If its tenets are followed, many an inoffensive gallbladder, appendix, uterus and ovary will be spared.

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OUTWITTING YOUR YEARS. By Clarence William Lieb, M.D., Prentice-Hall, Inc., N. Y., 1949. $2.75.

This book is apparently designed for the lay reader who has passed his fiftieth year, noted the slowing-up processes of age, and become unduly alarmed by them. The author endeavors, at great length, to allay these fears and develop a philosophy of life which will enable the aging individual to exploit the advantages of age and minimize its hardships. Most of the material contained in the book is medically sound, but it is accompanied by such a "pollyannaish" attitude that one wonders how effective it would be with the intelligent reader. It should certainly be read by the physician before he indiscriminately recommends it to his older patients.

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ATLAS OF PERIPHERAL NERVE INJURIES. By William R. Lyons, Ph.D., Associate Professor of Anatomy, University of California Medical School, and Barnes Woodhall, M.D., Professor of Neurosurgery, Duke Medical School, Durham, North Carolina. W. B. Saunders Company, Philadelphia, Pa., 1949. $16.00.

This handsome book of 339 large pages, well printed, and with 135 beautiful full page plates, mostly of photomicrographs, presents an excellent picture of the histopathology of injured nerves. It is essentially an atlas of factual histological findings and is studiously free from personal opinions of the authors. It is not a book that can be easily read, but if painstakingly studied, an excellent conception is gained of the microscopic processes that occur in injured and repaired nerves. By thought on the part of the reader, conclusions may be reached on the causes of success or failure in nerve repair. It is a presentation of the microscopic findings in 1943 to 1945 mostly from specimens from some of one thousand nerve operations performed on war injuries in Halloran and Walter Reed general hospitals.

The findings are detailed and accurately described in chapters on the following subjects: The normal nerve, the completely severed nerve, traumatic nerve lesions in continuity, sutured nerves, and nerve grafts. The description of the histology in the normal nerve is excellent. The chapter on the completely severed nerve gives a complete picture of what takes place in the proximal and distal nerve stumps, in the surrounding tissue, and in the healing by nature's effort to repair. New axones are shown growing down both epineural, intrafascicular regions, and perineural sheaths, thus arguing that patency of the tubules is not essential for regeneration.

Under traumatic lesions in continuity are well shown the causes for non-regeneration, such as atrophy, collagenization, etc., in nerves injured by partial severance, strangulation by adhesions, pressure, traction, and ischemia. The degree and kind of lesion that causes nerve block and just how much a nerve can be expected to repair are well shown. The attempt is made to classify lesions according to the conceptions of Sedden and Thornburn. In the lesions of continuity shown there is such a preponderance of fibrosis over proliferation of neurites that it seems best when in doubt to resect and suture.

The chapter on sutured nerves shows, of necessity, such a predominance of specimens of junctures that failed that one must resist acquiring a pessimistic viewpoint. It portrays well the various causes of failure, such as insufficient resection, poor fibrotic junctures as in the presence of infection, large silk interneural sutures, the use of wrappers, stretch fibrosis, and separation because of too early or too strenuous traction. Some dire effects from the use of tantalum foil are shown but the condemnation of this nonsurgical procedure is all too feeble. Considering that, as stated, in 2,348 cases of nerve suture out of the 6,364 reported, foil was wrapped about the juncture, the percentage of good results in nerve regeneration in World War II will be materially reduced. Even a wrapper of fibrin film was found to be bad. The findings in this chapter argue for accuracy of nerve suture, the use of fine suture material in the sheath only, freedom from tension, and placement of the juncture free from wrappers or surrounding scar into a bed of good tissue.

The chapter on nerve graft shows many specimens from cases in which there was no regeneration. This is not surprising as in the cases reported of the 67 grafts done in World War II, most were of fresh or frozen homografts. Specimens from only five autografts were studied, and of these two were reported. One was too large a nerve to become nourished and the other was a cable graft unfortunately surrounded at its ends by tantalum foil.

This book, emanating from World War II and the product of great painstaking and honest effort, is a valuable record and contribution to a clear conception and knowledge of nerve injuries.

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MICROBIOLOGY AND MAN. By Jorgen Birkeland, Ph.D., Professor of Bacteriology, Ohio State University, Columbus. Second Edition. The Williams and Wilkins Company, Baltimore, Md., 1949. $5.00.

As the author states . . . "this book is intended for the student who plans to take but one or two courses in microbiology." Although this book is definitely not written for the physician or even the medical student, it nonetheless fills the need for a well-written, authoritative book on the subject of microorganisms, particularly those producing disease, which can be read with profit by anyone interested in obtaining a general background in this field. The style is unusually lucid and informative and examples and illustrations are singularly well-chosen. In the field of elementary microbiology, this book is highly acceptable.